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**Hutt Park
City of Edmonds
Vandalized Tree Replacement Report
Edmonds, WA**



October 7, 2014

**Report Prepared For:
Rich Lindsay, City of Edmonds**

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1. Summary

I was contacted by Mr. Rich Lindsay, Park Maintenance Manager at the City of Edmonds on September 9, 2014 to provide a proposal for the inventory and assessment of trees vandalized in Hutt Park, City of Edmonds, WA. The work was authorized and my report of findings follows along with comments regarding the health of the Hutt Park forest and restoration options.

2. Client

The client to whom this report is addressed is:

Mr. Rich Lindsay, Park Maintenance Manager, City of Edmonds, Washington.

3. Assignment

The assignment is to inventory and assess trees damaged by vandals in Hutt Park and to provide an estimate of remedial actions or replacement costs for those trees.

4. Competence

I am an arborist and forester certified by the International Society of Arboriculture, and by the Society of American Foresters. I am a Registered Consulting Arborist and a Certified Tree Risk Assessor. I have been a practicing forestry consultant in western Washington since 1971 and have been practicing consulting arboriculture since the mid 1980's. I am a licensed Real Estate Broker in the State of Washington. I hold a Bachelor of Science degree in Forest Management from the University of Washington (1971)

5. Purpose and Use of Report

The purpose of this report is to assist the City of Edmonds in determining the best course of action with respect to trees recently vandalized in Hutt Park and to estimate the costs of replacement for trees not expected to be viable in the future.

6. Limits of Assignment

The assignment is limited to the information gathered during the site visit on September 9, 15, 16 and 23, 2014. No invasive methods were used to assess tree condition unless fully described in the "Analysis and Testing" section of this report. Information from published and verbal sources cited herein is assumed to be reliable.

7. Site Description

The subject property is an approximate 5 acre naturally regenerated (for the most part) forest area within the City of Edmonds. The topography is generally moderate, draining northerly. The site is criss-crossed with numerous foot trails used locally for passive recreation. The forest cover is variable with scattered very large Douglas-fir, cedar and hemlock trees predominating along with big leaf maple, alder and native cherry. One mature redwood was also found. Shrub cover is ferns, salmonberry, non-native blackberry and non-native ivy. A dozen or so non-native sapling redwoods were found. It is undetermined whether these are naturally seeded or planted.

The park is not formally managed and no facilities beyond the casual trails are in place.

8. Methodology

I visited the site on September 9, 2014 in the company of Mr. Lindsay and AFM forester/arborist Bob Layton. On September 15, 16 and 22 I returned to the site and conducted an inventory of the damaged trees. I approximately located the west park boundary after locating a pipe at the apparent southwest corner and hand compassing a line northerly to the apparent northwest corner. This apparent boundary is marked with blue/white striped ribbon. Other boundaries were more self-evident based on neighbor uses. The inventory consisted of a systematic search across the property for vandalized trees. Those found were marked with orange paint to prevent double counting. I measured the stem diameter at 1-foot above ground level and noted the species and damage. I took a subsample of heights and ages.

9. Observations

The following table summarizes the inventory. Girdled trees were generally hacked at about chest height all around the stem. Damaged trees were generally hacked only on one side. The girdling wounds all pierced the cambium layer, thus killing the trees above that point. A total of 84 trees were girdled and 13 hacked on one side.

In addition, 9 trees were found girdled immediately west of the property on apparent private property owned by Mrs. Solo. Rich Lindsay has been working with Solo's on damaged trees on that private property. On this property, 4 giant sequoia trees are found, that appear to have been planted. These are roughly 12-feet in height.

Table 1- Hutt Park Tree Damage Summary					
Species	Girdled				Hacked one side
	Caliper	Height	Number	Age	Number
Big leaf Maple	1	8	12	6	
	1.5	14	6	8	
	2	16	7	8	4
	2.5	18	11	12	
	3	20	10	12	2
	3.5	24	6	12	
	4	20	6	18	4
	4.5	30	2	18	
	5	35	4	22	
	5.5	45	1	22	
	6	50	3	22	3
	7	50	2	22	
	8	50	1	27	
	9	60	2	32	
	10	50	3	32	
11	50	3	32		
13	50	2	45		
14	55	1	45		
			82		
Bitter Cherry	1.5	30	1	6	
	6	60	1	20	
			2		
Total			84		13

Girdled					
Species	Caliper	Height	Number	Age	
Big leaf M	8	50	1	27	
Alder	10	50	1	8	
	11	50	1	8	
	12	60	1	25	
	19	85	1	45	
	21	85	1	45	
	26	85	1	45	
Cherry	4	35	<u>2</u>	25	
Total			9		

10. Analysis and Testing

No laboratory testing was initiated as part of this assignment. I used an increment borer on some of the larger girdled trees to estimate age by ring count. Other tree ages were estimated by ring count at on the severed stems.

11. Discussion

Big leaf maple is a prolific sprouter as is bitter cherry. Often, cut stumps will sprout and regrow numerous stems. This can be expected of all of the damaged maple on this tract. The result will be multiple stem trees with poor attachments just below the hacks. Attempting to culture the sprouts by thinning out the clumps might be considered but the results will not likely be successful due to weakened attachments and fungal attacks at the wounds.

In its natural state, maple can reach up to 100 feet in height. Cherry will reach similar heights. These species are shade tolerant and often grow under mature conifer forest trees. (USDA Forest Service) The soil and light conditions at Hutt Park are conducive to these species survival.

The vandalized trees can be reestablished by planting sapling size trees as discussed following. However, a significant problem will be the sprouted stumps. Sprout suppression in forestry applications is typically accomplished with the application of water soluble amines or potassium salts of phenoxy herbicides on cut stumps. (USDA Forest Service) If management precludes the use of herbicides, then one is faced with repeated sprout cutting over several years until the root system dies.

The overall health of the Hutt Park Forest has not been significantly affected by the vandalism. The expected mortality and resprouting of the trees vanadalized has not affected the undamaged trees and most likely will not in the future. It is noted that some of the trees vandalized were “overtopping” some of the redwoods and at least on western red cedar. Assuming those are preferred species, then there is some benefit realized in the short term in that they will respond to

increased light levels. However, in the longer term, the re-sprouting will lead to even greater canopy size and increased shading.

12. Recommendations

- A. Cut all vandalized trees down to within 1-foot of ground level.
- B. Immediately Treat each stump with Garlon 4 plus carrier to prevent sprouting
- C. Replace each tree with a suitable size replacement (see appraisal section below)
- D. Planting can be done without soil amendment but first year watering is recommended
- E. Mulch each planting with 4-inches of organic material (wood chips), properly applied
- F. Water each planting bi-weekly the following summer, June 15-September 15

It is noted that the City may choose not to replace any or all damaged trees due to adequate residual tree stocking in place. (Rich Lindsay, City of Edmonds) In this event, the recommendation and management items in A and B above should be carried out.

13. Appraisal

Valuation Considerations

The Guide for Plant Appraisal published by the International Society of Arboriculture provides guidance in estimating the value of trees. The primary factors beyond species and size are the condition of the tree before and after a damaging event and Location of the tree on or near the interested party's property. Trees are rated on a scale of 0-100; a 0 factor indicating a dead/hazardous condition and a 100 factor indicating a perfect specimen.

Species is an indication of the trees adaptability and characteristics; determined by consensus of regional arborists. (Species Ratings For Landscape Tree Appraisal; PNW Chapter International Society of Arboriculture.2007) . (note that in the cost forwarding procedure described following, this rating factor is not used, as per the Guide). However the species subject to this report are all well-suited to the Hutt park site.

The size of the trees is typically measured at 12-inches above ground level for of transplantable size trees. This convention is used herein for all trees in order to provide comparability to available nursery stock even though some were larger than the typically available 4-inch caliper.

Condition considers the structural integrity of the tree and its health. In this instance, the condition of each cut tree in this forested setting is assumed to be 100 as they are in their natural setting due to the nature of the assignment. The before and after condition is a measure of the damage, if any, to the tree. In this case, each tree is considered a total loss as explained above.

Location considers the property Site, or relative landscape quality in the neighborhood; Placement or function in the landscape; and Contribution, the tree's unique aesthetic and functional value in the landscape. Each sub-factor is rated against optimal landscaping and the three are averaged to estimate the final Location factor. Again, in this instance each tree is assumed to be well located in this natural forest and no deduction for location is made.

The appraisal of trees can be estimated using the income, comparable real estate sales, and cost (reproduction and replacement) approaches. (Council of Tree & Landscape Appraisers, Guide for Plant Appraisal (9th Ed., 2000).

a. Income Approach.

The income approach is based on the value of forest products or nursery stock that can be produced. In this case, the trees are in a residential setting and would not likely produce nor be grown for income.

b. Comparable Sales Approach.

The comparable real estate sales approach is beyond the scope of this report.

c. Reproduction/Replacement Approaches.

Reproduction of the trees is not a likely or practical solution. While it would be possible to replace the trees with large nursery specimen up to 30-feet in height, in my opinion a prudent manager would not go to such extraordinary measures, particularly in view of likely collateral damage to existing vegetation and soils. As well, survival of larger trees is less reliable than with small stock.

Cost forwarding is a technique in which the cost of an available sized replacement tree is "forwarded" for the number of years at which its function is restored at an alternative rate of return for other investments.

Option A

The subjects vary from 8-feet and about 6 years old to 50-feet and nearly 40 years in age. Replacement trees about 4-5-feet in height could be acquired from local nursery sources. (Wetlands/Woodlands, Aldrich Tree Farms, Clark Nursery) and installed on site by qualified tree service companies (Washington Tree Experts and Alpine Tree Service) for around \$45 each The function of each tree would be "grown to" in the years expected to attain pre-damage size at an alternative investment rate of 7%. (Approximate 30 year T-Bill Return). (See Addendum II-A). The installed cost, grown to present size for all 97 trees is \$19,517.

In addition, a tree removal cost including cutting the trees down, hauling the debris to a street-side chipper and disposal must be added. This is estimated by the tree services at approximately \$2,500. Other costs include cut stump treatment with herbicide at \$1,000 and hand irrigation for one season at \$2,500.

The total cost to replace the vandalized trees under this method is:

Installed Forwarded Cost:	\$19,517
Sales Tax:	\$ 1,690
Clean-up:	\$ 4,000
Stump Treatment:	\$ 1,000
Irrigation:	\$ 2,500
Administration @20%:	<u>\$ 5,741</u>
Total:	\$33,948

Option B

Replacement trees about 12-16 feet in height could be acquired from local nursery sources and installed on site for around \$405 each.(Big Trees of Washington) The function of each the tree would be

“grown to” in the years expected to attain pre-damage size. In this method, motorized equipment is needed to move the planting stock, and dig the root holes. Access for freight trucks is also required. Big Trees warrants the trees for 1 year under certain conditions, including installed irrigation. (See Addendum II-B). The installed cost, grown to present size for all 97 trees is \$77,893.

Installed Forwarded Cost:	\$ 77,893
Sales Tax:	\$ 6,620
Clean-up:	\$ 4,000
Stump Treatment:	\$ 1,000
Irrigation:	\$ 2,500
Shrub restoration:	\$ 1,000
Administration @10%:	<u>\$ 9,301</u>
Total:	\$102,314

:

Option C

In this option, only the clean-up is done and no replacement trees are installed.

Clean-up:	\$ 4,000
Stump Treatment:	\$ 1,000
Administration @ 10%	<u>\$ 500</u>
Total:	\$ 5,500

13. Conclusions

The above appraisal methods develop a range of values:

Option A:	\$ 33,948
Option B:	\$102,314
Option C:	\$ 5,500

Option A considers planting smaller tree stock requiring less preparation and greater chance of survival than B. It is in my opinion a cost effective method to begin the restoration process. Option B, requires greater expertise, large equipment and unavoidable collateral damage. Option C only cleans up the damage with no restoration. In my opinion the most reasonable action is found in Option A at \$33,948, rounded to \$34,000

Thirty-Four Thousand Dollars

14. Assumptions and Limiting Conditions

1. Any legal description or property line location provided to the consultant is assumed to be correct. Property lines were not marked on the ground by survey—consultant assumes reported trees are within Hutt Park. Ownership of the subject trees as provided by the client is assumed to be correct. No responsibility is assumed for legal matters.
2. Care has been taken to obtain all information from reliable sources. The consultant can neither guarantee nor be responsible for the accuracy of information provided by others.
3. The consultant shall not be required to give testimony or attend court by reason of this report unless subsequent contractual arrangements are made, including additional fees.
4. This report and any values expressed herein represent the opinion of the consultant, and the consultant's fee is in no way contingent upon the reporting of a specified value, a stipulated result, the occurrence of a subsequent event, nor upon any finding to be reported.
5. The exhibits in this report are included to assist the reader and are not necessarily to scale.
6. Unless expressed otherwise, information in this report covers only items that were examined, and reflects the condition of those items at the time of inspection. The inspection is limited to visual examination of accessible items without laboratory analysis, excavation, or coring, unless otherwise stated.
7. Loss or alteration of any part of the report invalidates the entire report. Ownership of any documents related to this report passes to the client only.
8. The liability of American Forest Management, Inc., its contractors and employees is limited to the client only and only up to the amount of the fee actually received for the assignment.
9. This report does not consider the obligations of the underlying land owner(s) regarding any government regulations with respect to the subject property.

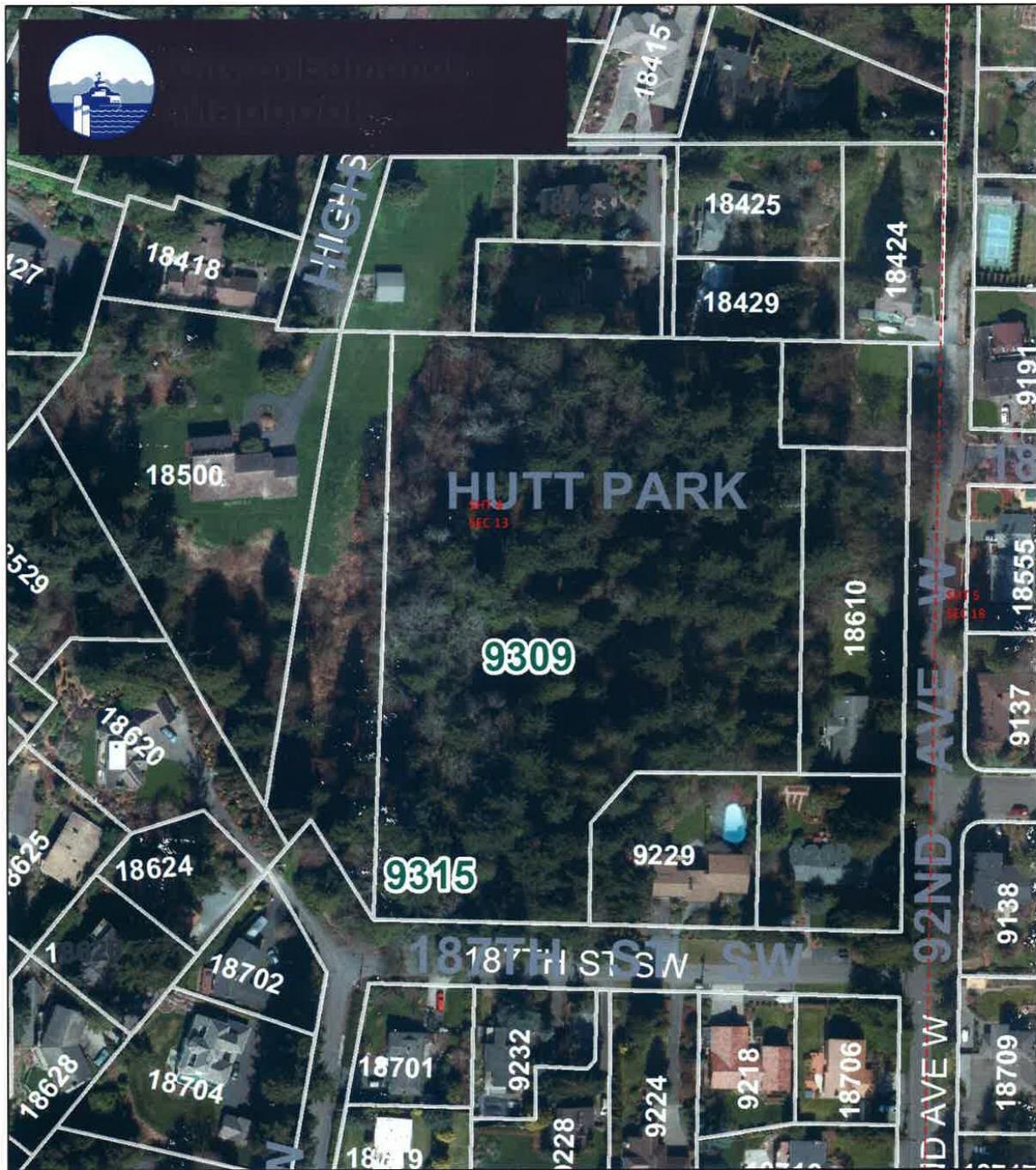
Please call if you have any questions or if I can be of further assistance.

Sincerely,



Tom Hanson
ISA Certified Arborist #PN-0426A
Registered Consulting Arborist #499
Certified Tree Risk Assessor #763

Addendum I
Maps and Illustrations



Woodway
This document is for general information purposes only and is provided on an 'as is' and 'as available' basis. The data used comes from a variety of public sources and no warranty of any kind is given as to its accuracy. Users of this document agree to indemnify and save harmless the City of Edmonds, its officials, officers, employees and agents from and against any claim, demand or action arising out of or from the use of this document.

Addendum II- Site/Tree Photos



Typical Hutt Park Landscape



Girdled and Hacked Big leaf maple clump



Typical Girdle and Hack

Addendum III – Glossary of Common Terms

DBH	Diameter at breast height, 4 ½' above ground level
Bole	The tree stem
Cambium	The layer of growth cells just under the bark
Crown	The live branches or live leaves or live needles of a tree
Dieback	Notable dead foliage, starting at the end of a branch or the top of a tree
Epicormic	a shoot arising from a dormant bud following exposure to sunlight
Girdling	Cutting through the bark to the cambium, all around the tree stem
Limb Collar	The swelling at the junction of the bole and limb
Pruning	The cutting and removal of limbs
Taper	The ratio of diameter on different points of a trunk, stem or branch
Topping	Removal of the main stem above live, green limbs
Trimming	Shortening or cutting of limbs
Viable	A structurally sound and healthy condition
Vigor	Tree health and growth rate

Vegetation Species

Red alder	<i>Alnus rubra</i>
Bigleaf Maple	<i>Acer macrophyllum</i>
Bitter Cherry	<i>Prunus emarginata</i>
Redwood	<i>Sequoia sempervirens</i>
<i>Sequoia</i>	<i>Sequoia giganteum</i>
Black berry	<i>Rubrus lacinatus</i>
Salmonberry	<i>Rubrus spectabilis</i>
Ivy	<i>Hedra, sp.</i>

Addendum IV

Work Sheets

ADDENDUM I/A																	
City of Edmonds, Hutt Park - 2014 Vandalized Trees																	
Damaged Vegetation				Replacement Vegetation							Appraised Cost						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	17	18	19
#	Species	Size Inches	Condition %	Replacement Species	Size feet	# Plants	Plant Cost	Total Plant Cost	Adjusted Plant Cost (Wise)	Install Cost	Total Cost to Install	Actual Replacement Cost	Years to Parity	Annual Interest Rate Factor	Future Installed Cost	Future Maint. Cost	Compounded Appraised Value
12	Maple	1	100%	Maple	4-5'	12	\$ 15	\$ 180	\$ 180	\$ 30	\$ 360	\$ 540	3	1.23	\$ 662	\$ 600	\$ 1,262
6	Maple	1.5	100%	Maple	4-5'	6	\$ 15	\$ 90	\$ 90	\$ 30	\$ 180	\$ 270	5	1.40	\$ 379	\$ 300	\$ 679
11	Maple	2	100%	Maple	4-5'	11	\$ 15	\$ 165	\$ 165	\$ 30	\$ 330	\$ 495	5	1.40	\$ 694	\$ 550	\$ 1,244
11	Maple	2.5	100%	Maple	4-5'	11	\$ 15	\$ 165	\$ 165	\$ 30	\$ 330	\$ 495	9	1.84	\$ 910	\$ 550	\$ 1,460
12	Maple	3	100%	Maple	4-5'	12	\$ 15	\$ 180	\$ 180	\$ 30	\$ 360	\$ 540	9	1.84	\$ 993	\$ 600	\$ 1,593
6	Maple	3.5	100%	Maple	4-5'	6	\$ 15	\$ 90	\$ 90	\$ 30	\$ 180	\$ 270	9	1.84	\$ 496	\$ 300	\$ 796
10	Maple	4	100%	Maple	4-5'	10	\$ 15	\$ 150	\$ 150	\$ 30	\$ 300	\$ 450	15	2.76	\$ 1,242	\$ 500	\$ 1,742
2	Maple	4.5	100%	Maple	4-5'	2	\$ 15	\$ 30	\$ 30	\$ 30	\$ 60	\$ 90	15	2.76	\$ 248	\$ 100	\$ 348
4	Maple	5	100%	Maple	4-5'	4	\$ 15	\$ 60	\$ 60	\$ 30	\$ 120	\$ 180	19	3.62	\$ 651	\$ 200	\$ 851
1	Maple	5.5	100%	Maple	4-5'	1	\$ 15	\$ 15	\$ 15	\$ 30	\$ 30	\$ 45	19	3.62	\$ 163	\$ 50	\$ 213
6	Maple	6	100%	Maple	4-5'	6	\$ 15	\$ 90	\$ 90	\$ 30	\$ 180	\$ 270	19	3.62	\$ 976	\$ 300	\$ 1,276
2	Maple	7	100%	Maple	4-5'	2	\$ 15	\$ 30	\$ 30	\$ 30	\$ 60	\$ 90	19	3.62	\$ 325	\$ 100	\$ 425
1	Maple	8	100%	Maple	4-5'	1	\$ 15	\$ 15	\$ 15	\$ 30	\$ 30	\$ 45	24	5.07	\$ 228	\$ 50	\$ 278
2	Maple	9	100%	Maple	4-5'	2	\$ 15	\$ 30	\$ 30	\$ 30	\$ 60	\$ 90	29	7.11	\$ 640	\$ 100	\$ 740
3	Maple	10	100%	Maple	4-5'	3	\$ 15	\$ 45	\$ 45	\$ 45	\$ 90	\$ 135	29	7.11	\$ 960	\$ 150	\$ 1,110
3	Maple	11	100%	Maple	4-5'	3	\$ 15	\$ 45	\$ 45	\$ 30	\$ 90	\$ 135	29	7.11	\$ 960	\$ 150	\$ 1,110
2	Maple	13	100%	Maple	4-5'	2	\$ 15	\$ 30	\$ 30	\$ 30	\$ 60	\$ 90	42	17.14	\$ 1,543	\$ 100	\$ 1,643
1	Maple	14	100%	Maple	4-5'	1	\$ 15	\$ 15	\$ 15	\$ 30	\$ 30	\$ 45	42	17.14	\$ 771	\$ 50	\$ 821
1	Cherry	1.5	100%	Maple	4-5'	1	\$ 16	\$ 16	\$ 16	\$ 31	\$ 31	\$ 47	43	18.34	\$ 862	\$ 50	\$ 912
1	Cherry	6	100%	Maple	4-5'	1	\$ 17	\$ 17	\$ 17	\$ 32	\$ 32	\$ 49	44	19.63	\$ 962	\$ 50	\$ 1,012
4	TRAQ Assessment--assumed 100% in this assignment													97			\$ 19,517
8	Wholesale Cost																
12	Labor and Delivery																
14	Years to replace damaged plant function																

Hutt Park Tree Assessment

September 29, 2014

ADDENDUM I-B City of Edmonds, Hutt Park - 2014 Vandalized Trees																				
Damaged Vegetation				Replacement Vegetation																
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19		
#	Species	Size inches	Condition %	Replacement Species	Size feet	# Plants	Plant Cost	Total Plant Cost	Adjusted Plant Cost (Whistle)	Install Cost	Total Cost to Install	Actual Replacement Cost	Years to Parity	Compound Annual Interest Rate Factor	Future Installed Cost	Future Maint. Cost	7.0 %	Appraised Value		
																			10	11
12	Maple	1	100%	Maple	12-16'	12	\$ 225	\$ 2,700	\$ 2,700	\$ 180	\$ 2,160	\$ 4,860	1	1.07	\$ 5,200	\$ 600	\$ 5,800			
6	Maple	1.5	100%	Maple	12-16'	6	\$ 225	\$ 1,350	\$ 1,350	\$ 180	\$ 1,080	\$ 2,430	1	1.07	\$ 2,600	\$ 300	\$ 2,900			
11	Maple	2	100%	Maple	12-16'	11	\$ 225	\$ 2,475	\$ 2,475	\$ 180	\$ 1,980	\$ 4,455	1	1.07	\$ 4,767	\$ 550	\$ 5,317			
11	Maple	2.5	100%	Maple	12-16'	11	\$ 225	\$ 2,475	\$ 2,475	\$ 180	\$ 1,980	\$ 4,455	2	1.14	\$ 5,101	\$ 550	\$ 5,651			
12	Maple	3	100%	Maple	12-16'	12	\$ 225	\$ 2,700	\$ 2,700	\$ 180	\$ 1,620	\$ 4,320	4	1.31	\$ 6,370	\$ 600	\$ 6,970			
6	Maple	3.5	100%	Maple	12-16'	6	\$ 225	\$ 1,350	\$ 1,350	\$ 180	\$ 1,080	\$ 2,430	6	1.50	\$ 3,647	\$ 300	\$ 3,947			
10	Maple	4	100%	Maple	12-16'	10	\$ 225	\$ 2,250	\$ 2,250	\$ 180	\$ 1,800	\$ 4,050	6	1.50	\$ 6,078	\$ 500	\$ 6,578			
2	Maple	4.5	100%	Maple	12-16'	2	\$ 225	\$ 450	\$ 450	\$ 180	\$ 360	\$ 810	10	1.97	\$ 1,593	\$ 200	\$ 1,693			
4	Maple	5	100%	Maple	12-16'	4	\$ 225	\$ 900	\$ 900	\$ 180	\$ 720	\$ 1,620	12	2.25	\$ 3,649	\$ 200	\$ 3,849			
1	Maple	5.5	100%	Maple	12-16'	1	\$ 225	\$ 225	\$ 225	\$ 180	\$ 180	\$ 405	15	2.76	\$ 1,117	\$ 50	\$ 1,167			
6	Maple	6	100%	Maple	12-16'	6	\$ 225	\$ 1,350	\$ 1,350	\$ 180	\$ 1,080	\$ 2,430	18	3.38	\$ 8,213	\$ 300	\$ 8,513			
2	Maple	7	100%	Maple	12-16'	2	\$ 225	\$ 450	\$ 450	\$ 180	\$ 360	\$ 810	18	3.38	\$ 2,738	\$ 100	\$ 2,838			
1	Maple	8	100%	Maple	12-16'	1	\$ 225	\$ 225	\$ 225	\$ 180	\$ 180	\$ 405	18	3.38	\$ 1,369	\$ 50	\$ 1,419			
2	Maple	9	100%	Maple	12-16'	2	\$ 225	\$ 450	\$ 450	\$ 180	\$ 360	\$ 810	20	3.87	\$ 3,134	\$ 100	\$ 3,234			
3	Maple	10	100%	Maple	12-16'	3	\$ 225	\$ 675	\$ 675	\$ 180	\$ 540	\$ 1,215	20	3.87	\$ 4,702	\$ 150	\$ 4,852			
3	Maple	11	100%	Maple	12-16'	3	\$ 225	\$ 675	\$ 675	\$ 180	\$ 540	\$ 1,215	20	3.87	\$ 4,702	\$ 150	\$ 4,852			
2	Maple	13	100%	Maple	12-16'	2	\$ 225	\$ 450	\$ 450	\$ 180	\$ 360	\$ 810	20	3.87	\$ 3,134	\$ 100	\$ 3,234			
1	Maple	14	100%	Maple	12-16'	1	\$ 225	\$ 225	\$ 225	\$ 180	\$ 180	\$ 405	20	3.87	\$ 1,567	\$ 50	\$ 1,617			
1	Cherry	1.5	100%	Maple	12-16'	1	\$ 225	\$ 225	\$ 225	\$ 180	\$ 180	\$ 405	20	3.87	\$ 1,567	\$ 50	\$ 1,617			
1	Cherry	6	100%	Maple	12-16'	1	\$ 225	\$ 225	\$ 225	\$ 180	\$ 180	\$ 405	22	4.43	\$ 1,794	\$ 50	\$ 1,844			
4	TRAQ Assessment-assumed 100% in this assignment													97				\$	77,893	
8	Wholesale Cost																			
12	Labor and Delivery																			
14	Years to replace damaged plant function																			

Addendum V - Qualifications of Arborist Thomas M. Hanson

Experience Summary

Mr. Hanson has 41 years of experience as a consulting forester in conjunction with 30 years as a consulting arborist. He has conducted numerous residential hazard tree assessments, developed and administered tree protection plans and evaluated many tree trespass and damage projects. He has significant experience as an expert witness in tree valuation cases.

Mr. Hanson has conducted appraisals of forests, forest land and rural land throughout Washington State to the standards of the Appraisal Foundation and Uniform Standards of Federal Land Acquisition. He is a Washington State Licensed Real Estate Broker.

**Director of Client Relations
International Forestry
Consultants, Inc.**
a subsidiary of American
Forest Management, Inc.

Assignment

*Project Administrator, Company
Manager, Chief Timber Appraiser*

Education

*B.S., Forest Management, 1971,
University of Washington*

Experience

41 Years

Joined Firm

1971

Related Activities

■ *President., Washington State
Society of American Foresters*

■ *Past-President, University of
Washington College of Forest
Resources Alumni Association*

■ *Trustee, Washington Forest
Protection Association*

■ *Past-Chair, Society of American
Foresters, South Puget Sound
Chapter*

■ *Secretary, State Society of
American Foresters*

■ *Board of Directors, Black
Mountain Forestry Center*

■ *Company Representative,
Sustainable Forestry Initiative*

Timber Appraisal

- Conducted timber cruises and prepared or assisted with narrative appraisals on hundreds of parcels throughout the state including timber, timber lands, transition lands and environmentally sensitive lands to USPAP and Yellow Book Standards as required.
- Assignment sizes ranged from 10 to 80,000+ acres.
- Maintains log price files, conducts logging cost analyses and stumpage reports for private industry client for IRS and internal review purposes.

Urban Forestry

- Administered street tree inventories for the cities of Snohomish, Lakewood, Fife, Kent and Steilacoom. Developed spreadsheet solutions for data input to unique GIS infrastructure for each City. Developed hazard tree criteria and conducted or assisted with field inspections on street and park trees.
- Developed spreadsheet solutions and field data gathering systems for urban forest health projects as basis for inventory and renewal projects.
- On call arborist for the City of Everett in response to City personnel and citizen concerns regarding public and private street trees.
- Routinely assists developers, construction managers and real estate brokers with tree protection plans primarily in Eastside Cities of Kirkland, Redmond, Bellevue, Bothell and Woodinville among others.

Relevant Expertise

- Forestry Consultant since 1971
- Certified Forester #951
- Manager of SFI certified lands
- Certified Arborist #PN-0426A
- Registered Consulting Arborist #499
- Washington State Licensed Real Estate Broker
- Silviculture Auditor, SFI. Trained FSC auditor, Smartwood, Accredited American Tree Farm System Auditor
- Practicing Urban Tree Consultant in western Washington for 30 years
- Member – Association of Consulting Foresters, Society of American Foresters
- Attended Uniform Appraisal Standards for Federal Land Acquisitions (Yellow Book) Seminar.

assessment

September 29, 2014

- Testified in court on numerous occasions for plaintiff and defendant in tree trespass, tree condition and valuation issues.
- Supervised tree protection plans for the Highpoint Redevelopment Project, Seattle WA.
- Reviewer for the Council of Tree and Landscape Appraisers, Guide for Plant Appraisal, 9th and 10th editions.